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Mr. Rodolfo F. Bonacci, Assistant Chief Audio Division, Media Bureau Federal Communications Commission 445 Twelfth Street, SouthWest Washington, D.C. 20554	Charles N. "Norm" Miller, Engineer Audio Division, Media Bureau Federal Communications Commission 445 Twelfth Street, SouthWest Washington, D.C. 20554

Re: Operational Authority for Radio Station KRDE(FM),
FCC Facility ID No. 37577

Dear Messrs. Bonaci and Miller,

I am writing on behalf of Linda C. Corso, the licensee of station KRDE(FM).

Station KRDE is licensed as a nondirectional Class C2 facility with parameters of 640 Watts of ERP, Circularly Polarized, and Antenna Heights of 1039 meters AAT and 27 meters AGL. See FCC File No. BLH-20050331AND.

The licensed Class C2 main antenna no longer exists. An ice storm in December of 2009 caused the tower bearing the licensed main antenna to collapse. The collapse of the tower destroyed the antenna.

By letter of December 14, 2009, Ms. Corso notified the Commission of the destruction of the main antenna. In that same letter, Ms. Corso informed the Commission that she had invoked the provisions of Subsection (b) of the Emergency Antenna Rule, 47 C.F.R. § 73.1680, and had installed a Telewave vertical dipole on a 10-meter pole so that the Station could resume service to the public. Ms. Corso's letter further informed the Commission that the dipole's center of radiation was at 8 meters AGL and that the dipole was generating an Effective Radiated Power of 650 Watts, vertically polarized.

On December 23, 2009, Ms. Corso requested a Special Temporary Authority for continued use of the vertical dipole at an ERP of 650 Watts. See FCC File No. BSTA-20091223AMT. The Commission granted that request on December 29, 2009. The resulting STA would expire on June 29, 2010.

On June 10, 2010, Ms. Corso requested an extension of her Special Temporary Authority. See FCC File No. BESTA-20100610AEK. The Commission granted that request on July 13, 2010. The extended authority would expire on January 13, 2011.

On January 3, 2011, Ms. Corso requested a further extension of her Special Temporary Authority. See FCC File No. BESTA-20110103AAP. That request is currently pending before the Commission.

In addition to holding the Class C2 station license, Ms. Corso also holds a Construction Permit to upgrade the station to Class C1 facilities: 4.7 kW of ERP, Circularly Polarized, at the same Antenna Heights as the Class C2 station license specifies. See FCC File No. BPH-20070502AFL. The authorized Class C1 antenna is directional. The directional antenna's null is at 350° and corresponds to a radiated-field value is 0.67 relative to a maximum of 1.0. This also corresponds to a radiated-power value of 0.4489 (-3.48 dB).

Construction of the authorized Class C1 facility[1] was complete by the end of 2010, but the application for a license to cover the Construction Permit was not yet ready for filing. Therefore, to ensure continued operating authority, Ms. Corso filed her January 3, 2011 request for a further extension of her STA ten days before the then-outstanding authority would expires, as § 73.1635 (a)(1) requires. The timely filing of that further extension request afforded Ms. Corso continued authority to operate Station KRDE with the STA parameters. See 5 U.S.C. § 558(c).

Also now pending before the Commission is Ms. Corso's application, filed this past Friday, for a license to cover a Construction Permit. See FCC File No. BLH-20110114ACW. That application includes a request for Program Test Authority.

Ms. Corso has not been able to operate the Class C1 facility at half-power, pursuant to § 73.1620(a)(2), because of her decision to substitute an antenna from Propagation Systems, Inc., a different manufacturer than Electronics Research, Inc., which her application for Construction Permit had specified.

Until yesterday, Ms. Corso continued to use the vertical dipole pursuant to the Special Temporary Authority. However, on Sunday evening, January 16, at approximately 8 P.M. Arizona time, while driving her car, Ms. Corso noticed that the signal from KRDE appeared

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[1] The Class C1 facility includes a new antenna, a new transmission line, and a new, more powerful, transmitter.

weak. At approximately 10 P.M. Arizona time, a station employee sent Ms. Corso an email saying that he could not pick up the station at his home in Chandler, Arizona.

Yesterday, at approximately 6:30 A.M. Arizona time, a station employee called Ms. Corso at home from the station's main studio to inform her that the transmitter output power was at only 146 watts, instead of the nominal 840 watts that has been the norm for operation under the STA.[2]

At approximately 9 A.M. Arizona time yesterday, undersigned counsel consulted with Ms. Corso and with Ms. Corso's consulting broadcast engineer, Richard White of Klein White Broadcast Engineering. The plan of action would be as follows:

- Ms. Corso would try to get to the transmitter site via four-wheel drive vehicle or, if necessary, via a Snow Cat.
- Once at the transmitter site, Ms. Corso would attempt to restore STA operations at the authorized power level using the (old) transmitter that has been feeding the vertical dipole since the onset of emergency-antenna operations in December of 2009.
- If it proved not possible to restore STA operations at the authorized power level using the (old) transmitter and the vertical dipole, Ms. Corso would connect the new transmitter to the vertical dipole and would adjust the new transmitter's output power accordingly.
- If it proved not possible to restore STA operations at the authorized power level using the new transmitter and the vertical dipole, Ms. Corso would reconnect the new transmitter to the new main antenna and would adjust the new transmitter's output power to achieve a nominal value of 614 Watts. Based on the maximum gain of the new antenna 1.14, or +0.57 dB), as reported by the manufacturer, and based on the rated efficiency of the new transmission line (-0.39345 dB, or 91.34%), a Transmitter Power Output of 614 Watts would result in a maximum ERP of 640 Watts – the same value of ERP as specified in the station's outstanding license, FCC File No. BLH-20050331AND.

The access road to the site was not passable by normal wheeled vehicles, including those with four-wheel drive. So, at approximately 10 A.M. Arizona time yesterday, Ms. Corso arranged for a Snow Cat to take her and her husband up to the transmitter site. Ms. Corso and her husband arrived at the transmitter site at approximately 4 P.M. Arizona time.

Once inside the equipment shelter, Ms. Corso attempted to increase the output power of the (older) transmitter that she has been using to feed the vertical dipole. She could not increase the

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[2] The transmission line connecting the "old" transmitter to the vertical dipole has a rated efficiency in the neighborhood of 77%.

output power of the transmitter beyond 146 watts… less than 20% of the amount needed to achieve the authorized (STA) ERP of 650 Watts.

Ms. Corso then tried connecting the new transmitter, recently installed as part of the implementation of Construction Permit BPH-20070502AFL, to the vertical dipole. The new transmitter refused to deliver power to the vertical dipole and flashed a "Fault" indicator.

Ms. Corso concluded that there must be a fault in either the vertical dipole or in the transmission line connected the vertical dipole. She therefore restored the connection between the new transmitter and the new (directional) main antenna, and energized the new transmitter.

The new KRDE transmitter is a BEXT Model FB5000. The output power of the FB5000 is set in 25-watt gradations, starting at 150 watts, and increasing to a maximum of 5,000 watts. The impedance match of the antenna system, the stability of the raw a.c. power supplied by the local electric utility, and other other site-specific variables will dictate what the actual r-f output power will be within the 25-Watt window. The closer to perfect that all of the variables are, the closer to the top of the 25-Watt window the r-f output power will actually be, and vice versa.

Setting the output window to be 600-625 Watts ensures a minimum r-f output power of 600 Watts, and no more than 625 Watts under *perfect conditions*. Perfect conditions, of course, never really exist. E.g., in the case of KRDE, the measured Voltage Standing Wave Ratio was measured during equipment tests to be 1.06:1, and that value will vary somewhat with ambient temperature. given that even without all the other environmental and site specific variables the antenna match is 1.06:1. It is reasonable to assume that the transmitter will run in the mid-range of the selected window, 10 to 15 Watts above the "floor." In this case, that would be 610 to 615 Watts.

So, station KRDE is now on the air using the new transmitter, the new feedline, and the new antenna. The maximum ERP in the major lobe is 640 Watts. Such operation is pursuant to § 73.1680(b)(2), the Emergency Antenna rule, and this letter is notification on Ms. Corso's behalf to that effect. If you deem it necessary, I will file a substantially identical letter addressed to the Secretary of the Commission and filed through the Office of the Secretary.

Although the antenna that Ms. Corso is using is not one that she has had erected for temporary use, as § 73.1680(a) contemplates, it is the only antenna that is immediately available for reliable operation under the present circumstances. Moreover, the mode of operation that Ms. Corso has implemented comports with the provisions of § 73.1680(b)(2):

> *FM, TV and Class A TV stations. FM, TV and Class A TV stations may erect any suitable radiator, or use operable sections of the authorized antenna(s) as an emergency antenna.*

Ms. Corso proposes that she continue to operate the station as described until the staff passes on her request for Program Test Authority. If the staff finds the showing set forth in license

application BLH-20110114ACW sufficient to justify a grant of full-power Program Test Authority, Ms. Corso will implement that grant by increasing the Transmitter Power Output to 4,511 Watts.

Ms. Corso further proposes that the staff hold in abeyance the pending request for extension of STA, FCC File No. BESTA-20110103AAP. A grant of the requested extension will become moot if the staff grants Program Test Authority for the newly constructed Class C1 facility. If, for some reason, a grant of Program Test Authority will not be forthcoming in the short term, then a simple extension of the outstanding STA will not provide Ms. Corso with authority to operate with the only operable facility presently available to her. In such event, Ms. Corso proposes that the extension request be the subject of an amendment specifying the new directional antenna and the licensed Class C2 values of Antenna Heights and the licensed Class C2 ERP of 640 watts.

Thank you in advance for your consideration of this letter. If you have any questions or concerns, please do not hesitate to raise them with me.

Very truly yours,

/JJM/

John Joseph McVeigh